

Remarks

In the non-final Office Action dated June 29, 2010, it is noted that claims 6-9 are allowed and the following new grounds of rejection are presented: claim 11 stands rejected under 35 U.S.C. § 112(1); claims 1, 11 and 15 stand rejected under 35 U.S.C. § 103(a) over Lee (U.S. Patent No. 6,483,355); claims 12-14 stand rejected under 35 U.S.C. § 103(a) over the '355 reference in view of Soltanian (U.S. Patent No. 6,700,514); claims 1 and 15 stand rejected under 35 U.S.C. § 103(a) over Pickett (U.S. Patent No. 6,771,945) in view of Ichihara (U.S. Patent No. 7,206,360); claims 2-5 stand rejected under 35 U.S.C. § 103(a) over the '945 and '360 references in view of the '355 reference; and claim 11 stands rejected under 35 U.S.C. § 103(a) over the '360 reference in view of the '355 reference. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action. Applicant incorporates all previous Office Action Responses into the instant response.

Applicant appreciates the indication of allowable subject matter in claims 6-9.

Applicant respectfully traverses the §103(a) rejections of claims 1-5 and 11-15 because the Office Action consistently fails to provide proper obviousness type rejections. According to the M.P.E.P. and relevant case law, and as discussed in M.P.E.P. § 2142,

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

Although the current Office Action provides multiple rejections for many of the claims, it does not appear that any of the rejections include an articulated reasoning in support of the conclusion of obviousness. For example, in rejecting claims 12-14 the Office Action states, without support, that using the teachings of the secondary '514 reference would be an obvious design choice, and it would be therefore obvious to modify the primary '355 reference. Similarly, in rejecting claims 1-5 and 15 over the '945 reference in view of at least the '360 reference, the Office Action attempts to support a finding of obviousness by stating it would have been obvious to

modify the primary '945 reference as claimed "as an alternative of obvious design choice." None of the Office Action's assertions of design choice are supported in the Office Action. Nor do the asserted modifications appear to fall within the recognized rationale for a design choice modification outlined in M.P.E.P. §2144.04. Instead, the Office Action appears to be attempting to support an assertion of obviousness based on the mere fact that various prior art references teach different aspects of the claimed invention. However, the Supreme Court has held that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-419 (U.S. 2007). Accordingly, the § 103(a) rejections are improper and should be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1 and 15 over the '355 reference for lack of correspondence. For example, the '355 reference does not teach the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, the output of an amplitude detector coupled to the gain control input of an amplifier-circuit. Instead, the '355 reference teaches the output of the asserted amplitude detector is coupled to a charge pump 746b and the asserted gain control input is connected to a loop filter 746c. Because neither reference teaches aspects of the claimed invention directed to a gain control input of an amplifier coupled to the output of an amplitude detector, no reasonable interpretation of the asserted prior art, taken alone or in combination, can provide correspondence. Accordingly, the § 103(a) rejection of claim 1 fails and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claim 11 over the '355 reference for lack of correspondence. For example, the '355 reference does not teach the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, an amplifier with at least a first input and a first output coupled to each other via a first adjustable feedback gain element. In order to properly assert correspondence, "the elements must be arranged as required by the claim." M.P.E.P. § 2131. The rejection presented in the Office Action fails to assert correspondence to aspects of an adjustable feedback gain element connected between the input and output of an amplifier. Additionally, the embodiment of the '355 reference in the cited FIG. 7 does not appear to include a feedback loop between an output and an input of an amplifier. Accordingly,

the '355 reference lacks correspondence and the § 103(a) rejection of claim 11 is improper and should be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 12-14 because the cited '355 reference either alone or in combination with the '514 reference lacks correspondence to the claimed invention. For example, neither of the asserted references teaches the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, a first input and a first output of an amplifier-circuit coupled to each other via a first adjustable feedback-gain element, and a second input and a second output of the amplifier circuit coupled to each other via a second adjustable-feedback gain element. More specifically, the '355 reference does not teach claimed aspects directed to an amplifier-circuit having a feedback loop between the output of the amplifier circuit and the input of the amplifier circuit. Because neither reference teaches aspects of the claimed invention directed to the feedback gain elements situated as claimed, no reasonable interpretation of the asserted prior art, taken alone or in combination, can provide correspondence. Accordingly, the § 103(a) rejection of claims 12-14 fails and Applicant requests that it be withdrawn.

Further, the Office Action, on page 6, fails to assert correspondence to the limitations of claim 12. Instead, the Office Action states, that the '355 reference "would teach all the claimed limitations (*see* Figs. 7-8 and Col. 7:34-Col. 8:21) except for utilizing a non-differential signaling instead of a differential signaling for misers and VGAs." Such a rejection fails to provide enough detail for the Applicant to ascertain the propriety of the asserted rejection. For example, it is unclear to Applicant what the Office Action is attempting to assert as the input and output of the amplifier circuit, as well as the adjustable feedback-gain element. Accordingly, the §103(a) rejection of claims 12-14 is improper and should be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 1-5 and 15 over the '945 reference and the '360 reference because the asserted combination of references would be inoperable. Consistent with the recent Supreme Court decision, *M.P.E.P.* § 2143.01 states that "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." *Citing In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984); *see also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (U.S. 2007). ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more

likely to be non-obvious.”). The Office Action’s proposed modification to the ‘945 reference replaces the DC offset detection correction circuit with the amplitude detection circuit of the ‘360 reference. The intended purpose of the ‘945 reference and the asserted component 50 is DC offset correction. *See, e.g.*, Col. 1:5-7 (the field of invention includes the “method for reducing DC offsets”) and Col. 4:16-39. The amplitude detection circuit of the ‘360 reference rectifies the signal provided to the circuit. A rectified signal no longer conveys DC offset information because the negative signal values are rectified. Therefore, the proposed modification would no longer compensate for DC offset. Accordingly, the ‘945 reference would be inoperable for its intended purpose. *See, e.g.*, Col 1:5-7 (“method for reducing DC offsets”). Accordingly the § 103 (a) rejections of claims 1-5 and 15 are improper and should be withdrawn.

Applicant further traverses the § 103(a) rejection of claim 1-5 and 15 because the Office Action fails to provide a *prima facie* case of obviousness. The Office Action fails to provide proper motivation to combine the cited references as asserted, contrary to the requirements of M.P.E.P. § 2143.01, *e.g.*, there must be a reason to implement a “design choice”. Accordingly the rejection is improper and should be withdrawn.

Applicant respectfully traverses the newly presented § 112(1) rejection of claim 11, as well as the assertion that suppression of a video data signal constitutes new matter. Support for the limitation at issue can be found in Figures 1 and 4, as well as paragraphs 0039 and 0041 of Applicant’s published application. The Office Action acknowledges that the Specification supports the suppression of unwanted signals. Further, Applicant discusses translation of signals comprising audio and video information throughout the Specification. Paragraph 0039 discusses, with respect to Fig. 1, the use of mixer block 3 to frequency translate signals including audio/video information received by various devices, such as a mobile phone, that do not necessarily require or use both audio and video information. Accordingly, one of skill in the art, taking the specification as a whole, would understand that one unwanted signal contemplated was a video data signal.

Notwithstanding, and in an attempt to facilitate prosecution, Applicant has amended claim 11. Support for the amendment can be found in paragraph 0041 of the published application, for example, disclosing suppression of the unwanted portion of a signal. Further, there is support throughout the specification for audio and/or video data signals. Accordingly,

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Applicant requests the § 112(1) rejection for lack of written description, as well as the new matter rejection, be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, David Schaeffer, of NXP Corporation at (212) 876-6170.

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

CUSTOMER NO. 65913

Respectfully Submitted,

By: 

Robert J. Crawford
Reg. No.: 32,122
(NXPS.504PA)